VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

Release 6.3

NASA-NEMS-VDD-13

UNITeS Contract

April 2, 2004

National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
RELEASE 6.3

Submitted by

_____
Neal Cantrell   Date
Functional Area Lead

Reviewed by

UNITeS

_____   _____
Lindon Gargis   Date   Jim Cofer   Date
Agencywide IRM, Property   Configuration Management
and Procurement Systems

_____   _____
Hector Garcia   Date   Richard Bishop   Date
Agencywide IRM   DBA

Prepared by

Unified NASA Information Technology Services, Contract NNM04AA02C

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

April 2, 2004

VERSION DESCRIPTION DOCUMENT
FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
RELEASE 6.3

Approved by

_____
Marisa Wofford   Date
Consolidation Center
Project Manager

_____
Nikita Zurkin   Date
Program Functional Manager

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

April 2, 2004

TABLE OF CONTENTS

Section   **Page**

TABLE OF CONTENTS

Section   **Page**

1. <u>INTRODUCTION</u>

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS). This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1 IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS, Release 6.3 and has an effective release date of April 2, 2004.

1.2 PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
342	Local Data Field
378	Accept Certain Web Transactions
379	Add Grid Location to Building Number Table
380	Reminder Notice for web transactions
381	Web assistance contact
386	Automate 1324 Input into LIMS
387	Restrict access to certain Common NEMS Tables
388	Report 134 Selection Criteria
389	Change access to all centers on NEMS-HISTORY FIND for Transaction 019
390	Restrict Table 040 (Manufacturer's Code Table) to add only for Centers
391	*NUMBER on Incoming Transfer ADHOC
392	Reversal of Survey Transactions
393	Report 833 prints multiple ECNs on each report
400	NEMS web front-end items count too small

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

<u>CCR</u>	<u>Title</u>
	None

1.3 SCOPE

This VDD provides the functional and technical user of NEMS with information regarding the content, status, and structure of Release 6.3, including the following:

- Changes implemented since Release 6.2;

- Validation procedures to ensure the reliability of release changes;

- References to other documentation affected by this release;

- Detailed software installation instructions.

No waivers are associated with this release.

1.4 CONTACT POINTS

Sustaining Engineering for NEMS is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

2. <u>FUNCTIONAL INFORMATION</u>

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1 FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2 FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3 CRITICAL ISSUES

This section is not applicable for this release.

2.4 AFFECTED DOCUMENTS

The following documents were changed for this release:

NEMS Web Front End User Guide
NEMS User's Guide

2.5 APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. <u>TECHNICAL INFORMATION</u>

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1 TECHNICAL SYSTEM INTERFACES

This section is not applicable with this release.

3.2 DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in this release.

3.3 SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4 DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1 <u>Release Dataset Names</u>

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2 <u>Inventory of Objects</u>

Refer to Appendix D, Section 2.1, for an inventory of Natural object types.

3.4.3 <u>Storage Considerations</u>

The changes represented by this release should not affect storage requirements.

3.4.4 <u>Installation Procedures</u>

Refer to Appendix D, Installation Instructions for NEMS Software Release 6.3 for detailed software installation procedures.

3.5 OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. <u>KNOWN AND OPEN PROBLEMS</u>

There are no known or open problems related to this release

.

APPENDIX A - <u>ABBREVIATIONS AND ACRONYMS</u>

CC   Consolidation Center

CCR   Change Control Request

DBA   Database Administrator

DR   Discrepancy Report

FAX   Electronic Facsimile Transmission

IRM   Information Resources Management

JCL   Job Control Language

MSFC   Marshall Space Flight Center

NACC   NASA Automated Data Processing (ADP) Consolidation Center

NASA   National Aeronautics and Space Administration

NEMS   NASA Equipment Management System

NPDMS   NASA Property Disposal Management System

SESAAS   Sustaining Engineering Support for Agencywide Application Services

UNITeS   Unified NASA Information Technology Services

VDD   Version Description Document

APPENDIX B - <u>GLOSSARY</u>

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

APPENDIX C - <u>FUNCTIONAL CHANGE VALIDATION PROCEDURES</u>

Index of validation procedures for changes in this release:

Details for the validation procedures follow:

1.0 CCR 342 – Local Data Field

When inputting an I34 during the inventory process, you are required to put wording into the Local Data field. An I34 just means that the item was located, possibly in another location and that location will be updated when the transaction is processed. Appears to be an unnecessary added requirement.

Description of Change

Code was changed to make the Local Data Field an optional field for entry on the I34 transaction.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Perform Inventory Transaction I34 on an ECN that is an overage in inventory. Expected Results: The LOCAL DATA (Y/N) field will be available for input. Valid values for input will be Y (yes) or N (no).

MODULE ID	MODULE NAME	TYPE
NEMSINV		
TRNI34P1	Update Inventory No Change to Equipment File I34	Program

2.0 CCR 378 - Accept Certain Web Transactions

If a transaction is pending in the Web system and a manual transaction is processed, the transaction will not be completed in the Web system because the last ERN does not match. Certain transactions should be accepted regardless of the last ERN such as transactions in the on-line system that do not affect what is being changed in the WEB system. Data appears to be accepted/processed but the data in NEMS does not change.

Description of Change

Added code to review transactions that have occurred since the web transaction was started. If they do not impact the web transaction, the web action will be allowed. Otherwise the web pending record will be deleted and the web transaction will not be applied. The following change transactions from either NEMS, Inventory, or PCM will not allow the web transaction to continue: 26, 31, 52, 60, or 62.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Perform a web transaction 26 or 31 for an ECN. After performing the web transaction perform one of the following transactions: 26, 31, 52, 60, or 62. Expected Results: Error 880 – Pend Entry Ref Number is not equal to Entry Ref Number will be displayed on the LIST OF EQUIPMENT web screen.
- Perform a web transaction 26 or 31 for an ECN. After performing the web transaction perform a change transaction that is NOT one of the following transactions: 26, 31, 52, 60, or 62. Expected Results: Transaction can be approved by the gaining user.

_____

MODULE ID	MODULE NAME	TYPE
NEWDELN1	Determine Deletes from Web Pending	Subpgm
NEWXFRN1	Change to a new user (Web User Number Change)	Subpgm
TRNW26N1	Change Transaction 26 (Web Custodian Account Change)	Subpgm
TRNW31N1	Change Transaction 31 (Web User Number Change)	Subpbm

3.0 CCR 379 – Add Grid Location to Building Number Table

When building changes, TC 29, are processed using the Web system the grid location are not updated. The grid location   must be changed manually before the inventory is scheduled to ensure that the equipment is in the correct grid.

Description of Change

Code was changed to add the grid location to the Building Number table (102). Code was also changed to update the grid location based on the building number table for Web Transaction 29 (W29).

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Add a record to the Building Number Table (102).
  Expected Results: User will have the opportunity to enter the grid location corresponding to the building number.
- Change a record on the Building Number Table (102).
  Expected Results: User will have the opportunity to change the grid location corresponding to the building number.
- Perform the Building Number Table Adhoc. Choose the Building Number option (1).
  Expected Results: The Grid Location will be displayed next to the building number (if present).
- Perform the Building Number Table Adhoc. Choose the Building Name option (2).
  Expected Results: The Grid Location will be displayed next to the building number (if present).
- Schedule and run the Building Number Table Report (930).
  Expected Results: The Grid Location will be displayed next to the building number (if present).
- Perform a W29 transaction on an ECN.
  Expected Results: The Grid Location will be updated based on the new Building Number.

MODULE ID	MODULE NAME	TYPE
TBL102P1	Building Number Table Update	Program
ADH102P1	Building Number Table Adhoc List	Program
ADH102P2	Building Number Table Adhoc List	Program
NEWLOCL1		LDA
RPT930P1	Building Number Table Report	Program
RPT930P2	Building Number Table Report	Program
TRNW29N1	Change Transaction 29 (Web Equipment Location Change)	Subpgm

4.0 CCR 380 – Reminder notice for web transactions

Some Web transactions are initiated but never accepted by the intended receiver.

Description of Change

Code was added to allow the users to specify the number of days to send a reminder email for transactions on the NEMS Web Pending file and to specify the number of days to delete transactions from the NEMS Web Pending file. Reminder emails will be sent and transactions will be deleted from the NEMS Web Pending file when the new maintenance job is run.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Add a table record for table S14 (Web Pending Notification/Delete Table)
  Expected Results: The Web Pending Notification/Delete table for the installation will be added.
- Perform the Adhoc for table S14 (Web Pending Notification/Delete Table)
  Expected Results: The Web Pending Notification/Delete table for the installation will be displayed.
- Schedule and run the D11 (MSD011P1) - WEB PENDING RECORD VERIFICATION
  Expected Results: The maintenance job should run successfully and ECNs that have been on the Web Pending file more than the Notification days will receive an email and ECNs on the Web Pending file more than the Delete days will be deleted.

_____

MODULE ID	MODULE NAME	TYPE
ADHS14P1	Report Number Table Adhoc List	Program
MSD011N1	Generates JCL for Email Notification	Program
MSD011P1	Prepares to Send Email	Program
TBLS14P1	Email Days Table Update	Program

5.0 <u>CCR 381 – Web assistance contact</u>
Users of the Web system do not know whom to contact for assistance.

Description of Change
Code was changed to identify a local POC for each center for assistance with the NEMS Web system.

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
- **NOTE:** For users of the NEMS Web System only.
- Select the Local NEMS POC on any of the screens.
  Expected Results: A screen will be displayed with the local contact's name, phone number, and the ability to Email the Local POC.

_____

<u>MODULE ID</u>   <u>MODULE NAME</u>   <u>TYPE</u>
Web changes

6.0 CCR 386 – Automate 1324 input into LIMS

The output from the 1324 reports (420 & 430) is currently manually input into the LIMS system at NASA HQ. NASA HQ would like for the input to be automatically generated from the reports so that it can be electronically transmitted to NASA HQ. Information from the 435 - Recovery Rate Report will need to be included.

Description of Change

Code was added to in report 420 to include the Sensitive items Less Than $5000. Code was added in Report 435 to include FY06 – FY11 information. A new report (440 – 1324 – Extract to LIMS) was created to create the file that will be sent to LIMS.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Schedule and run reports 420, 430, 435, and 440.
  Expected Results: The 420, 430, 435, and 440 reports will run correctly. The file created from the 440 report will match the information from the 420, 430, and 435 reports.

_____

MODULE ID	MODULE NAME	TYPE
PRM440P1	1324 – Extract to NASA Headquarters	Program
RPT420P1	1324 – Controlled Equipment Report – NEMS	Program
RPT422P2	1324 – Controlled Equipment Report Detail – NEMS	Program
RPT430P1	1324 – Controlled Equipment Report	Program
RPT435P1	Recovery Rate Report – NEMS	Program
RPT440P1	1324 – Extract to NASA Headquarters	Program

7.0 <u>CCR 387 – Restrict access to certain Common NEMS Tables</u>

Users with access to update NEMS tables can update all of the core NEMS tables. A user changing or deleting a table record for a core NEMS table could cause problems for another center. Modifications to certain core tables should only be allowed to a certain few people (SESAAS, PFM).

Description of Change

Code was changed to restrict access to certain tables (S01, S02, S05, S09, S10, S13, 040, 045, 050, 052, 130, 132, 155, 160, 165, 180, 182, 184, 252, 410, 510, and 620) so that they can only be modified by authorized users.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Center users should try to access tables listed above.
  Expected Results: Message "Error 014 – User is not authorized to access requested table" is displayed.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
MNTUIDP1	UserID Table Update	Program

8.0 CCR 388 – Report 134 Selection Criteria
Report 134 reports on all history records with a borrowed out code of 'B' regardless of the delete transaction.

Description of Change
Code was changed to restrict the ECNs reported to the history records that have an Out Code of 'B' and were deleted by transaction 65, I65, or C65.

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
- Schedule and run the 134 report.
  Expected Results: Report 134 will execute correctly and list items that have been borrowed out and deleted with transaction 65, I65, or C65.

MODULE ID | MODULE NAME | TYPE
RPT134P2 | Borrowed Equipment Return Candidate List | Program

9.0 CCR 389 – Change access to all centers on NEMS-HISTORY FIND for Transaction 019

The FIND to get the sequence number on Transaction 019 (Reinstating Items Previously Lost on Survey) is only looking at the center's NEMS-HISTORY file. The FIND should look at all Centers' NEMS-HISTORY files.

Description of Change

Code was changed to look at all centers' history records instead of the user center's history records to get the correct sequence number for Transaction 019.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Perform Transaction 19 on an ECN that has been deleted by more than 1 center and the last delete transaction must be with transaction 71 (Surveyed). Expected Results: A message will be displayed indicating that the ECN has been added.
- Perform Transaction I19 on an ECN that has been deleted by more than 1 center and the last delete transaction must be with transaction 71 (Surveyed). Expected Results: A message will be displayed indicating that the ECN has been added.

MODULE ID	MODULE NAME	TYPE
NEMS		
TRN019P1	Add Transaction 19 (Reinstating Items Previously Lost on Survey)	Program
Inventory		
TRNI19P1	Add Transaction I19 (Reinstating Items Previously Lost on Survey)	Program

10.0 CCR 390 - Restrict table 040 (Manufacturer's Code Table) to Add only for Centers

The Manufacturer's Code Table (040) is available for Add, Change, and Delete access to all users. If a user deletes a manufacturer's code that they are not using at their center they could cause problems for another center that still uses that manufacturer's code. Only allow Change and Delete access to approved users.

Description of Change
Code was changed to allow Add access for Center's users and Add, Change, and Delete access for approved users.

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
- Add a record to Table 040.
  Expected Results: Record should be added successfully.
- Try to change an existing record on Table 040.
  Expected Results: Message "Error 001 – Invalid Function Entered" is received.
- Try to delete an existing record from Table 040.
  Expected Results: Message "Error 001 – Invalid Function Entered" is received.

MODULE ID	MODULE NAME	TYPE
TBL040P1	Manufacturer's Code Table Update	Program

11.0 CCR 391 – *NUMBER on Incoming Transfer ADHOC
When performing an Incoming Transfer ADHOC (option 13) if more than 1 record is on the history file then the History Sequence number is not getting the correct *NUMBER to build the field.

Description of Change
Code was changed to qualify the *NUMBER so that the correct history record will be retrieved.

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
• Perform the Incoming Transfer ADHOC (Option 13 on the ADHOC menu) for an ECN that has more than 1 history record and that has different Cap Sens Codes for each of the records.
   Expected Results: The ADHOC will return the history records for the sequence record selected and the correct Cap Sens Code.

MODULE ID   MODULE NAME   TYPE
ADH980P1   NEMS Transfer File Adhoc by ECN   Program

12.0 <u>CCR 392 – Reversal of Survey Transactions</u>

SURVEY deletes (71) that have been reversed with a RECEIPT FROM RETURN OF RECORD FROM HISTORICAL FILE (15) are showing up on report 420 and 435 on the REPORT OF SURVEY line. They will also be reported to LIMS in the report 440 processing.

Description of Change

Code was changed to not include a 71 transaction if a 15 was processed for it during the same time period and not include a 15 if a 71 was processed for it during the same time period.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Schedule and run the 420, 422, 430, 432, and 440 reports.
  Expected Results: These reports will not include any 71 and 15 transactions if they were processed during the same time period. The output file from the 440 report will match the output from the 420 and 430 report (report information from the 435 report will also be included).

MODULE ID	MODULE NAME	TYPE
RPT420P1	1324 – Controlled Equipment Report – NEMS	Program
RPT422P2	1324 – Controlled Equipment Report Detail – NEMS	Program
RPT430P1	1324 – Controlled Equipment Report	Program
RPT432P2	1324 – Controlled Equipment Report	Program
RPT440P1	1324 – Extract to NASA Headquarters	Program

13.0 <u>CCR 393 – Report 833 prints multiple ECNs on each report</u>
When report 833 (NEMS-1 by ECN (Batch to Laser Printer)) is scheduled for more that 1 ECN it schedules a job for each ECN. Each job that is scheduled also prints other ECNs that the job was scheduled for. Requirement is to still schedule a job for each ECN but to only print the ECN that the job is scheduled for and not all ECNs

Description of Change
Code was changed to only print 1 ECN per report.

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
• Schedule and run the 833 report with 2 or more ECNs requested.
  Expected Results: Each ECN will only have 1 1602 printed.

MODULE ID	MODULE NAME	TYPE
PRM833P1	NEMS-1 Selection Menu (Laser Printer)	Program
RPT833P1	Produces a NEMS-1 for a specified ECN	Program

14.0 <u>CCR 400 – NEMS web front-end item count too small</u>
When a custodian account has over 999 items assigned to it a problem occurs because the item count set up in the list equipment module is being exceeded.

Description of Change
Code was changed to allow up to 9999 items per user or custodian

Functional Impact
There is no functional impact as a result of this CCR.

Validation Procedures
- On the NEMS web front-end log in as a User or Custodian that has more than 999 items assigned to them.
  Expected Results: The User or Custodian will be able to log into the NEMS web front-end and view equipment assigned to them, equipment awaiting approval, or awaiting approval by others.

MODULE ID	MODULE NAME	TYPE
NEWLEAN1	List Equipment Waiting Approval	Subprogram
NEWLEUN1	List Equipment Assigned to a User / Custodian Account	Subprogram
NEWLOAN1	List Equipment Waiting Approval by Others	Subprogram

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 6.3

Introduction

Release information:

      System Name: NEMS
      Release Number: 6.3
      Release Date: April 2, 2004
      Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS)

    Telephone: (256) 544-6673
    Email: neal.cantrell@msfc.nasa.gov
    FAX: (256) 544-1836

The following datasets are located on the transient storage DASD volumes under the following data sets names:

MSMOV.NEMS.PROD.R630.R0304.SRC
xxMOV.NEMS.PROD.R630.R0304.PRD

Where "xx" is replaced by the appropriate NASA Center designation.

```
AR – ARC
DF – DFRC
GS – GSFC
HQ – HQ
J5 – JSC
KS – KSC
LA – LaRC
LE – GRC (Glenn)
MS – MSFC
SS – SSC
```

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in section 9.0 to assist in tracking the installation of this release.

1.0 Back Up Existing Data
2.0 Copy Source
3.0 Pre-Predict Data Conversion
4.0 Install Predict
5.0 Catalog Source Code
6.0 Post-Predict Data Conversion
7.0 Perform Release-Specific Procedures
8.0 Local JCL Mods
9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS files as a precautionary measure prior to installation.

2.0 Copy Source

This will be performed by SESAAS for the core modules. Any changes for site unique versions of these modules will be performed by the centers.

2.1 Copy Source Code

A. Source code is installed in three separate libraries. Source code for programs modified in this release version were unloaded in the NATUNLD format; these programs all have specific destination libraries as shown below. All the NEMS programs have a destination of NEMS; NEMSINV programs have a destination of NEMSINV and NEMSPCM programs have a destination of NEMSPCM.

   1. Load the NEMS source library from the dataset
      MSMOV.NEMS.PROD.R630.R0304.SRC

      The source programs were unloaded using the Natural utility NATUNLD. The NEMS programs:

1.	ADH102P1	Building Number Table Adhoc List	Program
2.	ADH102P2	Building Number Table Adhoc List	Program
3.	ADH980P1	NEMS Transfer File Adhoc by ECN	Program
4.	ADHS14P1	Report Number Table Adhoc List	Program
5.	MNTUIDP1	UserID Table Update	Program
6.	MSD011N1	Generates JCL for Email Notification	Program
7.	MSD011P1	Prepares to Send Email	Program

8.	NEMS	NEMS Banner Screen	Program
9.	NEWDELN1	Determine Deletes from Web Pending	Subpgm
10.	NEWLEAN1	List Equipment Waiting Approval	Subpgm
11.	NEWLEUN1	List Equipment Assigned to a User / Custodian Account	Subpgm
12.	NEWLOAN1	List Equipment Waiting Approval by Others	Subpgm
13.	NEWLOCL1		LDA
14.	NEWXFRN1	Change to a New User (Web User Number Change)	Subpgm
15.	PRM440P1	1324 – Extract to NASA Headquarters	Program
16.	PRM833P1	NEMS-1 Selection Menu (Laser Printer)	Program
17.	RPT134P2	Borrowed Equipment Return Candidate List	Program
18.	RPT420P1	1324 – Controlled Equipment Report – NEMS	Program
19.	RPT422P2	1324 – Controlled Equipment Report Detail – NEMS	Program
20.	RPT430P1	1324 – Controlled Equipment Report	Program
21.	RPT432P2	1324 – Controlled Equipment Report	Program
22.	RPT435P1	Recovery Rate Report – NEMS	Program
23.	RPT440P1	1324 – Extract to NASA Headquarters	Program
24.	RPT833P1	Produces a NEMS-1 for a specified ECN	Program
25.	RPT930P1	Building Number Table Report	Program
26.	RPT930P2	Building Number Table Report	Program
27.	TBL040P1	Manufacturer's Code Table Update	Program
28.	TBL102P1	Building Number Table Update	Program
29.	TBLS14P1	Email Days Table Update	Program
30.	TRN019P1	Add Transaction 19 (Reinstating Items Previously Lost on Survey)	Program
31.	TRNW26N1	Change Transaction 26 (Web Custodian Account Change)	Subpgm
32.	TRNW29N1	Change Transaction 29 (Web Equipment Location Change)	Subpgm
33.	TRNW31N1	Change Transaction 31 (Web User Number Change)	Subpgm

will be loaded to the application library NEMS, replacing any existing programs of the same name.

2. Load the NEMSINV source library from the dataset: MSMOV.NEMS.PROD.R630.R0304.SRC

The source programs were unloaded using the Natural utility NATUNLD. The NEMSINV programs:

34. NEMSINV	Inventory Banner Screen	Program
35. TRNI34P1	Update Inventory No Change to Equipement File I34	Program
36. TRNI19P1	Add Transaction I19 (Reinstating Items Previously Lost on Survey)	Program

will be loaded to the application library NEMSINV, replacing any existing programs of the same name.

3. Load NEMSPCM source library from the dataset:
   MSMOV.NEMS.PROD.R630.R0304.SRC

The source programs were unloaded using the Natural utility NATUNLD. The NEMSPCM Programs:

37. PCMMAP		Map

will be loaded to the application library NEMSPCM, replacing any existing programs of the same name.

The source module counts included in this release are listed below:

Natural Source Modules by Type	Count
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	1
MAPS	1
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	8
PROGRAMS	27
COPYCODE	0
TEXT	0
PROCESSOR	0
MISCELLANEOUS OBJECTS	0
Total:	37

2.2 List of Source Code Modifications

The following are the modules added, modified, and deleted.

Added Modules:

NEMS

1. ADHS14P1   Program
2. MSD011N1   Program
3. MSD011P1   Program
4. NEWDELN1   Subpgm
5. PRM440P1   Program
6. RPT440P1   Program
7. TBLS14P1   Program

INVENTORY
None

PCM
None

Modified Modules:

NEMS

8. ADH102P1   Program
9. ADH102P2   Program
10. ADH980P1   Program
11. MNTUIDP1   Program
12. NEMS   Program
13. NEWLEAN1   Subprogram
14. NEWLEUN1   Subprogram
15. NEWLOAN1   Subprogram
16. NEWLOCL1   LDA
17. NEWXFRN1   Subprogram
18. PRM833P1   Program
19. RPT134P2   Program
20. RPT420P1   Program
21. RPT422P2   Program
22. RPT430P1   Program
23. RPT432P2   Program
24. RPT435P1   Program
25. RPT833P1   Program
26. RPT930P1   Program
27. RPT930P2   Program
28. TBL040P1   Program
29. TBL102P1   Program

30. TRN019P1   Program
31. TRNW26N1   Subpgm
32. TRNW29N1   Subpgm
33. TRNW31N1   Subpbm

Inventory
34. NEMSINV   Program
35. TRNI34P1   Program
36. TRNI19P1   Program

PCM
37. PCMMAP   Map

Deleted Modules:

NEMS
None

Inventory
None

PCM
None

3.0 Pre-Predict Data Conversion

Not Applicable for this release.

4.0 Install Predict

4.1 Data Dictionary Changes

This release will include the new enhancements for Version 6.3.0. Details for changes in this release can be found under Section 4.1.3 Physical File Changes or by performing Predict reporting on the keyword NEMS-6.3.0.

Use SYSDICBE to load the PREDICT modifications from the dataset: xxMOV.NEMS.PROD.R630.R0304.PRD.

The following NEMS DDM should be generated after the PREDICT load is completed.

NEMS-TABLE

4.1.1 Inventory of Objects

The object types and inventory listed below represent a comprehensive count of the Predict object modules for this release.

PREDICT Objects by Type:

```
Keyword                    -      1
ADABAS Files and Views  -      1
```

4.1.2 Storage Considerations

Not applicable with this release.

4.1.3 Physical File Changes

Add the following field:

```
NEMS-TABLE                              File # 195
    Ty L Field ID                       F   Length   Occ    D U DB S
    *- - ------------------------------ *- -------- ----- * * -- *
       1 T-LOCATION                      A     5.0                AL N
```

Using the following commands:

```
//DDKARTE  DD  *
ADADBS NEWFIELD FILE=195
ADADBS FNDEF='01,AL,5,A,NU'
/*
```

5.0 Catalog Source Code

To be performed by the SESAAS DBA.

Run a batch job to catalog (CATALL) all modules in the NEMS library using the NASA Batch Standard Parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. It is not necessary to catalog the Global Data Area (GDA).

You should receive 35 NATURAL 0303 errors for modules that begin with RPT* that concern page overflow and 27 programs will produce NATURAL 0002 errors. There should be a total of 62 NATURAL errors.

A list of errors found above and dispositions of these results follows:
- To compile the NATURAL 0303 errors correctly, run another CATALL for the RPT* modules in the NEMS library using the NASA Batch Standard Parameters. You should receive 12 NATURAL 0002 errors. Ignore the 0002 errors because these objects are dynamic. You should also CATALL the JRNRPTP1 module using the NASA Batch Standard Parameters.

- The 27 NATURAL 0002 errors from the first CATALL are to be IGNORED because these objects are dynamic.

Run a batch job to catalog (CATALL) all modules in the NEMSINV library using the NASA Batch Standard Parameters. It is not necessary to catalog the Global Data Area (GDA). There should be no errors received.

Run an online catalog (CATALL) on module TRNI34P1 and TRNILOP3 to prevent problems with access to the second screen.

Run a batch job to catalog (CATALL) all modules in the NEMSPCM library using the NASA Batch Standard Parameters. It is not necessary to catalog the Global Data Area (GDA). There should be one NATURAL 0043 error received. See Section 9.0 Installation Checklist for instructions on how to correct these errors.

After all objects are compiled, the NEMS application will run under the NASA On-line Standard Parameters.

6.0 Post-Predict Data Conversion

Not Applicable for this release.

7.0 Perform Release-Specific Procedures

7.1 Add D11 to the Maintenance Table

Performed by SESAAS

MAINTENANCE NUMBER: D11

MAINTENANCE NAME: MSD011P1 - WEB PENDING RECORD VERIFICATION

7.2 Add Error Messages

Performed by SESAAS

G17   ERROR G17 - EMAIL DAYS MUST BE LT THE DELETE DAYS UNLESS EITHER IS 0

G18   ERROR G18 - CENTER RECORD NOT PRESENT ON TABLE S14

G19   ERROR G19 - EMAIL ADDRESS NOT PRESENT

G20   ERROR G20 - USER NUMBER XXXXXX NOT ON NEMS TABLE

7.3 Add New Table

Performed by SESAAS

TABLE ID: S14

TABLE DESCRIPTION: WEB PENDING NOTIFICATION/DELETE TABLE

TABLE AUTHORIZATION: 123

7.4 Add New Report

This step will be performed by SESAAS to add this report as a core report.

REPORT NUMBER: 440

REPORT NAME: 1324 - EXTRACT TO LIMS

REPORT OPTIONS (Y/N): Y

7.5 Modify Table Authority

Performed by SESAAS

The following tables should have their table access modified to be what is listed below:

```
 TABLE                                               TABLE
  ID    TABLE DESCRIPTION                          AUTHORITY
 -----  ------------------------------------------ ---------
  S01   TABLE DESCRIPTION AND AUTHORIZATION            4
  S02   ERROR CODES AND MESSAGES TABLE                34
  S04   SEQUENCE NUMBER TABLE                          3
  S05   REPORT NUMBER TABLE                           34
  S09   INVENTORY REPORTS BY ACCOUNT                  34
  S10   INVENTORY TRANSACTION TABLE                    4
  S13   INVENTORY REPORTS BY LOCATION                 34
  S14   WEB PENDING NOTIFICATION/DELETE TABLE        123
  040   MANUFACTURER'S CODE TABLE                   1234
  045   DEMILITARIZATION CODE TABLE                    4
  050   FEDERAL SUPPLY GROUP TABLE                     4
  052   EQUIPMENT TYPE ACCOUNT TABLE                   4
  078   CUSTODIAN ACCOUNT NUMBER TABLE                 3
  090   USER NUMBER TABLE                            123
  102   NASA BUILDING NUMBER TABLE                     3
  130   CAPITAL/SENSITIVE CODE TABLE                   4
  132   U. S. TREASURY AGENCY NUMBER TABLE             4
  155   EQUIPMENT MANAGEMENT CODE TABLE                4
  160   EQUIPMENT 'IN' CODE TABLE                      4
  165   EQUIPMENT 'OUT' CODE TABLE                     4
  180   HAZARDOUS MATERIAL CODE TABLE                  4
  182   PRECIOUS METAL CODE TABLE                      4
  184   IDLE EQUIPMENT CODE TABLE                      4
  252   NASA INSTALLATION NUMBER TABLE                 4
  410   AVAILABILITY STATUS CODE TABLE                 4
  510   CONDITION CODE TABLE                           4
  620   TRANSACTION NUMBER TABLE                       4
```

8.0 Local JCL Mods

Bold lines are new lines

```
JCLDD    100770    X      //CMWKF20  DD DSN=&&NEMSWK20,DISP=(,PASS),
JCLDD    100772    X      //           UNIT=SYSDA,SPACE=(CYL,(5,5),RLSE),
JCLDD    100774    X      //           DCB=(RECFM=FB)
JCLDD    100776    X      //CMWKF22  DD DSN=MSIRM.NEMSDD.RPT440,
JCLDD    100777    X      //           DISP=(SHR,KEEP,KEEP),
JCLDD    100778    X      //           UNIT=SYSDA,SPACE=(CYL,(5,5),RLSE),
JCLDD    100779    X      //           DCB=(RECFM=FB)
JCLNATLG100780X XX X   X //CMOBJIN  DD DSN=MSIRM.NEMSDD.MS.PSWDLIB,DISP=SHR
JCLDD    100790XXXX X   XX//CMSYNIN  DD *
```

The following lines should be added at the end of the JCL

```
JCLWBMAI910010              //IRNEMS2  JOB (AGAOHNEMS002,4485),'WEBMAIL',CLASS=D,
JCLWBMAI910020              //          MSGCLASS=A
JCLWBMAI910030              //NULLPROC EXEC PGM=IKJEFT01,REGION=6M,
JCLWBMAI910040              //          DYNAMNBR=50
JCLWBMAI910050              //SYSHELP DD  DSN=SYS1.HELP,DISP=SHR
JCLWBMAI910060              //SYSPROC DD  DSN=SYS2.UTILPROC(SMTPCOMN),DISP=SHR
JCLWBMAI910070              //SYSLBC  DD  DSN=SYS1.BRODCAST,DISP=SHR
JCLWBMAI910080              //ISPLOG  DD  SYSOUT=*
JCLWBMAI910090              //SYSPRINT DD SYSOUT=*
JCLWBMAI910100              //SYSTERM DD  SYSOUT=*
JCLWBMAI910110              //SYSTSPRT DD SYSOUT=*
JCLWBMAI910120              //SYSIN   DD  DUMMY
JCLWBMAI910130              //SYSTSIN DD  *
JCLWBMAI910140              SMTPCOMN TO(###############################################) +
JCLWBMAI910150              SU('WEB PENDING RECORDS NEED TO BE ADDRESSED') +
JCLWBMAI910160              DA('''XXCAM.NEMSDD.EMAIL.MESSAGE''')
JCLWBMAI910170              /*
```

A permanent dataset, XXCAM.NEMSDD.EMAIL.MESSAGE, will need to be created with a message for the recipient. The content of the message is at the discretion of the center. The SU is required but actual content is at the discretion of the center. The SMTPCOMN must be exactly as shown for the email address to be substituted into the email. If a CC is desired it will need to be hard-coded into the JCL. The email message will not provide information as to which record needs attendance since that can be determined by going into NEMS.

9.0 Installation Checklist

1.0   Back Up Existing Data
2.0   Copy Source
   2.1   Copy Source Code
   2.2   List of Source Code Modifications
3.0   Pre-Predict Data Conversion
4.0   Install Predict
   4.1   Data Dictionary Change
      4.1.1   Inventory of Objects
      4.1.2   Storage Considerations
      4.1.3   Physical File Changes
5.0   Catalog Source Code
6.0   Post-Predict Data Conversion
7.0   Perform Release-Specific Procedures
   7.1   Add D11 to Maintenance Table
   7.2   Add Error Messages
   7.3   Add New Table
   7.4   Add New Report
   7.5   Modify Table Authority
8.0   Local JCL Mods